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**Patent and Trademark Office**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/604,519 06/27/00 RYAN

V 16-2

EXAMINER

MMC2/1009

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ART UNIT

PAPER NUMBER

2814

DATE MAILED:

10/09/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

09/604,519

Applicant(s)

RYAN ET AL.

Examiner

David E Graybill

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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Applicant's election of Group I, claims 1-8 and 10-14 in Paper No. 8 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

In the rejections infra, reference labels are generally recited only for the first recitation of identical claim language.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1, 2, 4-8, 10-12 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Ikegami (6201308).

At column 1, lines 18-26; and column 4, lines 10-49, Ikegami teaches the following:

1. An integrated circuit comprising: a substrate 20; a plurality of bond pads 27a, 27b formed above the substrate; and

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a first isolated conductive trace 23 formed at an outer region of the substrate and coupled to at least two of the plurality of bond pads.

2. The integrated circuit of 1 wherein the first isolated conductive trace surrounds the plurality of bond pads.

4. The integrated circuit of 1 further comprising:  
second conductive regions "internal circuit" adapted to interconnect devices "transistors" formed in the integrated circuit, wherein the first isolated conductive trace is separate from the devices.

5. The integrated circuit of 1 wherein the first isolated conductive trace comprises at least two separate first isolated conductive traces 23, 24.

6. The integrated circuit according to 5 wherein the at least two separate first isolated conductive traces have a varying height relative to an upper surface of the substrate.

7. The integrated circuit according to 1 wherein the first isolated conductive trace is formed at the periphery of the integrated circuit.

8. The integrated circuit of 1 wherein the first isolated conductive trace comprises at least two separate isolated conductive traces, each of the separate isolated conductive traces coupled to at least two of the plurality of bond pads.

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10. An integrated circuit comprising: a substrate; a plurality of bond pads; and an isolated conductive tester runner 23 formed on the substrate and around the plurality of bond pads, the isolated conductive tester runner electrically coupled to at least two of the plurality of bond pads.

11. The integrated circuit of 10 further comprising a plurality of isolated conductive tester runners 23, 24.

12. The integrated circuit according to 11 wherein at least two of the plurality of the isolated conductive tester runners having a varying height relative to an upper surface of the substrate.

14. The integrated circuit of 10 further comprising: devices formed on the integrated circuit; and circuit conductive runners "internal circuit" adapted to interconnect the devices to form a circuit; wherein the isolated conductive tester runner formed on the substrate and around the plurality of bond pads is separate from the devices.

To further clarify the teaching of isolated conductive traces, it is noted that the traces are unique; therefore, they are isolated.

To further clarify the teaching of a tester runner, this limitation is an inherent property of the runner of Ikegami because the term "tester" merely denotes an intended use, and

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the intended use does not result in a structural difference between the claimed product and the product of Ikegami. Further, because the product of Ikegami is inherently capable of being used for the intended use, the statement of intended use does not patentably distinguish the claimed product from the product of Ikegami. Similarly, the manner in which a product operates is not germane to the issue of patentability of the product; Ex parte Wikdahl 10 USPQ 2d 1546, 1548 (BPAI 1989); Ex parte McCullough 7 USPQ 2d 1889, 1891 (BPAI 1988); In re Finsterwalder 168 USPQ 530 (CCPA 1971); In re Casey 152 USPQ 235, 238 (CCPA 1967). And, claims directed to product must be distinguished from the prior art in terms of structure rather than function. In re Danley, 120 USPQ 528, 531 (CCPA 1959). Product claims cover what a product is, not what a product does. Hewlett-Packard Co. v. Bausch & Lomb Inc., 15 USPQ2d 1525, 1528 (Fed. Cir. 1990).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 3 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikegami as applied to claims 1, 2, 4-8, 10-12 and 14, or in the alternative, over the combination of Ikegami and Lee (5811874).

Ikegami does not appear to explicitly teach an integrated circuit wherein a first isolated conductive trace and the isolated conductive tester runner has a chamfered region. Notwithstanding, it would have been an obvious matter of design choice bounded by well known manufacturing constraints and ascertainable by routine experimentation and optimization to choose this particular shape because applicant has not disclosed that the shape is for a particular unobvious purpose, produces

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an unexpected result, or is otherwise critical, and it appears prima facie that the product would possess utility using another shape. Indeed, it has been held that limitations directed to shape are prima facie obvious absent a disclosure that the limitations are for a particular unobvious purpose, produce an unexpected result, or are otherwise critical. See, for example, *In re Rose*, 220 F.2d 459, 105 USPQ 237 (CCPA 1955); *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976); *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984); *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

In any case, in the alternative, at column 5, lines 8-13 and 50-53, Lee teaches an integrated circuit wherein a first conductive trace 112 has a chamfered region. Moreover, it would have been obvious to combine the product of Lee with the product of Ikegami because it would reduce corner shear stress.

Applicant's amendment and remarks filed 7-25-01 are addressed in the rejection supra and are further addressed infra.

Applicant argues, "Ikegami does not disclose a conductive trace that is isolated on the substrate. The trace in Ikegami is interconnected to other devices, which in turn are connected to lower device operating levels." This argument is



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respectfully deemed to be unpersuasive because the adjective "isolated" does not limit the scope of the claim to traces not interconnected to other devices, which in turn are connected to lower device operating levels.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Any telephone inquiry of a general nature or relating to the status (MPEP 203.08) of this application or proceeding should be directed to the group receptionist whose telephone number is 703-308-1782.***

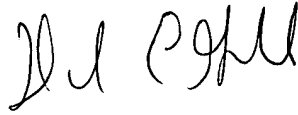
Any telephone inquiry concerning this communication or earlier communications from the examiner should be directed to David E. Graybill at (703) 308-2947. Regular office hours: Monday through Friday, 8:30 a.m. to 6:00 p.m.

The fax phone number for group 2800 is 703/305-3431.

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David E. Graybill  
Primary Examiner  
Art Unit 2814

D.G.  
2-Oct-01